Mailed Date: May 31, 2003 Filing Due Date: July 31, 2003

NOTIFICATION FOR FILING OPINION

Applicant: name; Kabushiki Kaisha Toshiba

Application No.: 10-2001-0056455

Title of Invention: Exponent conversion circuit and variable gain circuit using the

said circuit

As the result of examination of the present application, the following reasons for rejection have been found and notified herein under Section 63 of the Patent Law. Any opinion about the rejection [Form 25-2 attached to the Regulations under the Patent Law] or any amendment [Form 5 attached to the Regulations under the Patent Law] must be filed by the above date. (The above date is extensible by one month for each request. No notification of allowing extension of time will be issued.)

[Reason]

Regarding the invention described in the claims of the present application, in the technical field the invention belonged to before this application, a person skilled in the art can easily provide the invention using the matters pointed out below. Therefore, the present invention is unpatentable under the provision of the main sentence of Section 29 (2) of the Patent Law.

[Note]

Claims 1 and 11 of the present invention recite a technical means (idea) for inputting an output signal of a base block into an operational amplifier, impressing the output signal to a variable-transconductance amplifier, and to feedback the output in common mode. This is similar to the technical means of a logarithm conversion circuit and transconverter disclosed in Jpn. Pat. KOKAI Publication No. 11-88093 (March 30, 1999). The technical means to

feedback in differential mode with the variable-transconductance amplifier of the master block and the variable-transconductance amplifier of the slave block, from the variable-transconductance amplifier through the differential circuit is similar to Figs. 1, 4 and 5 of US Patent No. 5278518 (January 11, 1994). Figs. 1, 4 and 5 of US Patent No. 5278518 disclose technical means for an amplifying circuit that amplifies the differential feedback and adjusts the component gain. A person skilled in the art combining the references can provide the invention.

[Attachment(s)]

- 1. Cited invention 1
- 2. Cited invention 2